

## PATENT

## PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

Claims 1-8 (Cancelled)

9. (Currently Amended) An apparatus for transmitting channel quality values over a feedback channel to a base station, comprising:  
a re-synch subchannel generation system for generating a full channel quality value[[s]]; and  
a differential feedback subchannel generation system for generating a plurality of incremental values, wherein the plurality of incremental values are multiplexed with the full channel quality values; and  
a transmitter for transmitting the full channel quality value and the plurality of incremental values over multiple slots in a frame, wherein the plurality of incremental values are discarded by the base station.
10. (Currently Amended) The apparatus of Claim 9, wherein the plurality of incremental values are code-multiplexed with the full channel quality value[[s]].
11. (Currently Amended) The apparatus of Claim 9, wherein the plurality of incremental values are time-multiplexed with the full channel quality value[[s]].
12. (Original) The apparatus of Claim 9, further comprising a transition indicator subchannel generation system for generating a flag that indicates the start of a transitional period.
13. (Original) The apparatus of Claim 12, wherein a Walsh spreading element is used in the re-synch subchannel generation system and not used in the differential feedback subchannel.

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14. (Original) The apparatus of Claim 12, wherein a common Walsh function is used in the differential feedback subchannel generation system and the transition indicator subchannel generation system.

15. (Original) The apparatus of Claim 14, wherein the common Walsh function is used to indicate a base station index.

16. (Currently Amended) A method for transmitting channel information from a remote station to a base station, comprising:

generating a full channel quality value; and

generating a  $a[[n]]$  plurality of incremental channel quality values, wherein the incremental channel quality values ~~is~~ are multiplexed with the full channel quality value; and

transmitting the full channel quality value and the plurality of incremental values over multiple slots in a frame, wherein the plurality of incremental values are discarded by the base station.

17. (Canceled)

18. (Currently Amended) The method of Claim 16, wherein the incremental channel quality values ~~is~~ are generated over each slot in ~~the a-channel~~ frame.

19. (Currently Amended) The method of Claim 18, further comprising:  
generating a transition indicator, wherein the transition indicator is multiplexed with the incremental channel quality values and the full channel quality value and is used to indicate a transition period for the base station.

Claim 20 (Cancelled)

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21. (Currently Amended) Apparatus for transmitting channel information from a remote station to a base station, comprising:

means for generating a full channel quality value; and  
means for generating a plurality of incremental channel quality values, wherein the incremental channel quality values is are multiplexed with the full channel quality value; and  
means for transmitting the full channel quality value and the plurality of incremental values over multiple slots in a frame, wherein the plurality of incremental values are discarded by the base station.

22. (Currently Amended) The apparatus of Claim 21, further comprising:  
means for generating a transition indicator, wherein the transition indicator is multiplexed with the incremental channel quality values and the full channel quality value and is used to indicate a transition period for the base station.

Claims 23-27 (Cancelled)

28. (Currently Amended) A method for transmitting channel information from a remote station to a base station, comprising:

generating a full channel quality value and determining said full channel quality value exceeds a fixed maximum value represented by a finite number of data bits;  
generating an incremental channel quality value and fixing said incremental value as an up-increment value, wherein said fixing is in response to said determining;  
multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.

29. (Currently Amended) A method for transmitting channel information from a remote station to a base station, comprising:

generating a full channel quality value and determining said full channel quality value is below a fixed minimum value represented by a finite number of data bits;

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generating an incremental channel quality value and fixing said incremental value as a down-increment value, wherein said fixing is in response to said determining;

multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.

30. (Currently Amended) An apparatus for transmitting channel information, from a remote station to a base station, comprising:

means for generating a full channel quality value and determining said full channel quality value exceeds a fixed maximum value represented by a finite number of data bits;

means for generating an incremental channel quality value and fixing said incremental value as an up-increment value, wherein said fixing is in response to said determining;

means for multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.

31. (Currently Amended) An apparatus for transmitting channel information from a remote station to a base station, comprising:

means for generating a full channel quality value and determining said full channel quality value is below a fixed minimum value represented by a finite number of data bits;

means for generating an incremental channel quality value and fixing said incremental value as a down-increment value, wherein said fixing is in response to said determining;

means for multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.